

## **IN THE DRAWINGS**

### **ITEM # 2**

The Examiner stated in the Office Action...

" 2. The drawings are objected to under 37 C.F.R. 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "S-shape(d)" front surface, the "straight non-curved" front surface and the "beveled edge" (claim 8) must be shown or the feature(s) canceled from the claim(s). No new matter shall be entered"

In response to Item #2 in relation to "S-shape(d) front surface and the "straight non-curved" front surface, Claims #5, #6, #7,#11, #12, #13, #16, #17, #18, #19, #23 and #24 have been canceled.

In response to the "beveled edges", See Replacement Drawing with FIG.1 "top beveled edge 26" and "bottom beveled edge 27" shown. FIG. 8 has also been modified to show the "top beveled edge 26" and "bottom beveled edge 27". Also, note the changes on the Annotated Marked-up Drawings.

FIG.2 has also been modified in Replaced Drawing Sheet to show the "clamp mechanism 28 and the cut outs 29 and 30.

## REMARKS

If the Examiner has any questions concerning this case, please direct any inquiries to Gary M. Machetta at (281) 301-2005 Ext.11.

I have also attached a copy of

Appendix 1: The Examiner's Office Action Dated 02/24/2005.

Appendix 2: The "Revised Claims with Modification",

Appendix 3: A Clean Version of the New Claims,

Appendix 4: A revised copy of the Specification with Modifications (Absent the Claims),

Appendix 5: A clean copy of the Revised Specification (Absent the Claims).

Appendix 6: Two Replacement Drawings and

Appendix 7: Two Annotated Marked-Up Drawings

Respectfully submitted,  
Machetta Law Firm, P.C.



Gary M. Machetta  
Reg. No. 53,251

Machetta Law Firm, P.C.  
14614 Falling Creek Drive  
Suite 125  
Houston, TX 77068



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/758,514	01/15/2004	William Orman Wollgast	03005	5796

39047 7590 02/24/2005

MACHETTA LAW FIRM, P.C  
 14614 FALLING CREEK DRIVE  
 HOUSTON, TX. 77068



EXAMINER

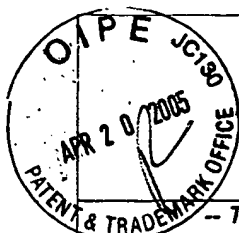
MAMMEN, NATHAN SCOTT

ART UNIT	PAPER NUMBER
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3671

DATE MAILED: 02/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.



## Office Action Summary

Application No.

10/758,514

Applicant(s)

WOLLGAST ET AL.

Examiner

Nathan S Mammen

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 April 0126.  
2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-24 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 15 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Specification*

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The specification fails to mention a “clamp mechanism” (found in original claim 8 and new claims 15 and 20) or a “beveled edge” (found in original claim 8).

### *Drawings*

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “S-shape[d]” front surface, the “straight non-curved” front surface and the “beveled edge” (claim 8) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet”

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pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

*Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, 7, 8, 10, 15, 16, 20, 21 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,809,449 to Solaja.

The Solaja '449 patent discloses an attachment for securing to a skid steer loader (see col. 5, line 23). The attachment comprises a connecting frame (34, 38, 40) allowing for connection to the skid steer, a base (32) connected perpendicular to the connecting frame, a front surface (16, 20) connected to the end of the base opposite the connecting frame and vertically curved, and a support structure (30, 36) connected between the connecting frame and the base to provide strength to the attachment. The connecting frame has two supporting cutouts (46) at the bottom and a clamp mechanism (48) at the top. The front surface (16, 20) is perpendicular to the base (i.e., the longitudinal axis is perpendicular to the longitudinal axis of the base). The front surface includes a surface (20) for cutting. The front surface (e.g., at 20) is perpendicular to the ground.

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Regarding claims 2-3, 7, 10, 13: The curved front surface has a concave shape (defined from the center) and appears to have a radius of at least 2 feet. The front surface includes a straight, non-curved surface (20) at least 2 feet in length.

Regarding claims 15, 16, 20, 21: The attachment comprises two supporting cutouts (46) at the bottom and a clamp mechanism (44) at the top.

5. Claims 1-13, 15-24 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,819,444 to Desmarais.

The Desmarais '444 patent discloses an attachment for securing to a vehicle. The attachment comprises a connecting frame (50), a base (6), a curved front surface (2, 4), and a support structure (42) connected between the connecting frame and the base. The curved front surface is movable to a plurality of shapes so that it can create a concave shape (Fig. 5), convex shape, an S-shape (see, e.g., Fig. 10), or a straight non-curved shape. The attachment includes supporting cutouts (48) and a clamp mechanism (18). The front surface includes a surface (52, 54) for cutting. Over time, contact with the ground will result in the cutting surface (52, 54) becoming beveled, or worn.

Regarding claims 15-24: The instant claims are directed to the attachment; therefore, the recitation of the backhoe or powered excavator is simply the intended use of the attachment. Since the Desmarais '444 patent discloses all the claimed features of the attachment, it anticipates the claims.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,808,027 to Anderson, cited previously by the examiner.

The Anderson '027 patent discloses apparatus having a connecting vehicle (not shown) with a connecting frame (36), a base (16), a curved front surface (24) and an edge (28, 30) designed for cutting. The apparatus is transported to an excavated area (e.g., Fig. 4) and is raised and lowered and used to spread dirt along the bottom. Although the Anderson '027 does not disclose that the apparatus is used specifically to smooth the walls of a swimming pool, it would be obvious to one having ordinary skill in the art to utilize the Anderson '027 patent for that purpose, since Anderson discloses in general a compacting device to be used wherever compaction and smoothing is needed. See col. 3, lines 64-67. As admitted by the Applicant, Specification, page 2, it is known in the art that the walls of a swimming pool must be smoothed.

#### ***Response to Arguments***

8. Applicant's arguments filed 12/06/04 have been fully considered but they are not persuasive.

As detailed in paragraphs 4 and 5 above, the Solaja '449 and Desmarais '444 patents disclose the claimed subject matter highlighted by the Applicant, such as the front surface being perpendicular to the ground (Solaja) and the front surface having a surface for cutting (Desmarais).



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***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

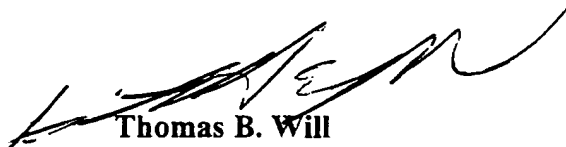
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Mammen whose telephone number is (703) 306-5959. The examiner can normally be reached Monday through Thursday from 6:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached at (703) 308-3870. The fax number for this Group is (703) 872-9306.

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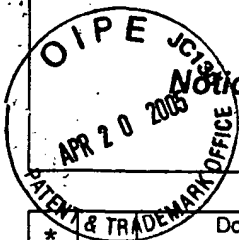
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-1113.



Thomas B. Will  
Supervisory Patent Examiner  
Group 3600

NSM  
2/21/05

Nathan S. Mammen



# Notice of References Cited

Application/Control No. 10/758,514	Applicant(s)/Patent Under Reexamination WOLLGAST ET AL.	
Examiner Nathan S Mammen	Art Unit 3671	Page 1 of 1

## U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-5,398,430	03-1995	Scott et al.	37/142.5
	B	US-5,096,334	03-1992	Plank, Michael J.	405/283
	C	US-4,698,926	10-1987	Caplis et al.	37/403
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

## FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

## NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Revised Claims with Modifications

1. [Currently Amended] An attachment for securing to a skid steer loader having;
  - A connecting frame allowing for the connection to a skid steer loader;
  - a base connected perpendicular to said connecting frame and near the bottom so that the base is directed just above the skid steer loader's connecting point providing support when the attachment is connected to the skid steer loader;
  - a front surface perpendicular to said base, where in said front surface is shaped as a concave shape;
  - said front surface connected to the end of the base opposite the connecting frame and vertically such that the front surface extends above and below the base and said front surface includes a surface for cutting located at the top of the front surface at a distance furthest from the ground;~~said front surface includes a surface for cutting and~~
  - a support structure connected between said connecting frame and said base to provide strength to the attachment.
2. [Canceled].
3. [Currently Amended] An attachment according to claim 1, wherein said front surface is shaped as a concave shape with radius ranges from ~~2 to 25~~ 4 to 16 feet.
- 4 - 7. [Cancelled].
8. [Currently Amended] An attachment for securing to a skidsteer loader having;
  - A connecting frame with two supporting cutouts towards the bottom for allowing the insertion of skidsteer latches and a clamp mechanism attached toward the top for securing the attachment;
  - a base connected perpendicular to said connecting frame and near the bottom so that said base is directed just above the skid steer loader connecting point providing support when the attachment is connected to the skid steer loader;
  - a front surface perpendicular to said base;
  - said front surface connected to the end of said base opposite said connecting frame and vertically such that said front surface extends above and below said base and said front surface includes a beveled edge located at the bottom of the front surface closest to the ground;~~said front surface includes a beveled edge and~~

a support structure connected between the connecting frame and the base to provide strength to the attachment.

9. [Previously presented] An attachment according to claim 8, wherein said support structure consists of three perpendicular supports.

10. [Currently amended] An attachment according to claim 8, wherein said front surface is shaped as a concave shape with radius ranges from ~~2 to 244~~ to 16 feet.

11. [Currently amended] An attachment according to claim 8, wherein said front surface is shaped as a convex shape with radius ranges from ~~2 to 244~~ to 16 feet.

12-13. [Canceled].

14. [Original] A method for smoothing the walls of a swimming pool during the construction of a swimming pool comprising the steps of:

a. connecting a vehicle with an attachment having a connecting frame, a base and a curved front surface with an edge designed for cutting,

b. transporting the attachment to the swimming pool wall,

c. raising or lowering the attachment while contacting the wall surface with the curved front surface of the attachment to smooth the walls,

d. collecting the dirt and other items at the bottom of the swimming pool or spreading the dirt and other items along the bottom of the pool by utilizing the attachment and

e. repeating the steps above as necessary.

15. [Currently Amended] An attachment for securing to a backhoe having;

A connecting frame with two supporting cutouts towards the bottom for allowing the insertion of a backhoe's latches and a clamp mechanism attached toward the top for securing the attachment;

a base connected perpendicular to said connecting frame and near the bottom so that the base is directed just above the backhoe's connecting point providing support when the attachment is connected to the backhoe;

a front surface perpendicular to the ground;

said supporting cutouts are oriented such that when the backhoe's latches are inserted the latches face the front surface;

said front surface connected to the end of the base opposite the connecting frame and vertically such that the front surface extends above and below the base and said front surface includes a surface for cutting located at the top of the front surface at a distance furthest from the ground;~~said front surface includes a surface for cutting and~~

a support structure connected between said connecting frame and said base to provide strength to the attachment.

16. [Currently Amended] An attachment according to claim 15, wherein said front surface is shaped as a concave shape with radius ranges from ~~2 to 244~~ to 16 feet.

17. [Canceled].

18. [Canceled].

19. [Canceled].

20. [Currently Amended] An attachment for securing to a powered excavator having;  
a connecting frame with two supporting cutouts towards the bottom for allowing the insertion of a powered excavator's latches and a clamp mechanism attached toward the top for securing the attachment;

a base connected perpendicular to said connecting frame and near the bottom so that the base is directed just above the powered excavator's connecting point providing support when the attachment is connected to the powered excavator;

a front surface perpendicular to the ground;

said supporting cutouts are oriented such that when the backhoe's latches are inserted the latches face the front surface;

said front surface connected to the end of the base opposite the connecting frame and vertically such that the front surface extends above and below the base and said front surface includes a beveled edge located at the top of the front surface; and

a support structure connected between said connecting frame and said base to provide strength to the attachment.

21. [Currently Amended] An attachment according to claim 20, wherein said front surface is shaped as a concave shape with radius ranges from ~~2 to 244~~ to 16 feet.

22. [Canceled].

23. [Canceled].

24. [Canceled].

Revised Claims - Clean Version

1. [Currently Amended] An attachment for securing to a skid steer loader having;
  - A connecting frame allowing for the connection to a skid steer loader;
  - A base connected perpendicular to said connecting frame and near the bottom so that the base is directed just above the skid steer loader's connecting point providing support when the attachment is connected to the skid steer loader;
  - A front surface perpendicular to said base, where in said front surface is shaped as a concave shape;
  - Said front surface connected to the end of the base opposite the connecting frame and vertically such that the front surface extends above and below the base and said front surface includes a surface for cutting located at the top of the front surface at a distance furthest from the ground. and
  - A support structure connected between said connecting frame and said base to provide strength to the attachment.
2. [Canceled].
3. [Currently Amended] An attachment according to claim 1, wherein said front surface is shaped as a concave shape with radius ranges from 4 to 16 feet.
- 4 - 7. [Cancelled].
8. [Currently Amended] An attachment for securing to a skidsteer loader having;
  - A connecting frame with two supporting cutouts towards the bottom for allowing the insertion of skidsteer latches and a clamp mechanism attached toward the top for securing the attachment;
  - A base connected perpendicular to said connecting frame and near the bottom so that said base is directed just above the skid steer loader connecting point providing support when the attachment is connected to the skid steer loader;
  - A front surface perpendicular to said base;
  - Said front surface connected to the end of said base opposite said connecting frame and vertically such that said front surface extends above and below said base and said front surface includes a beveled edge located at the bottom of the front surface closest to the ground. and

A support structure connected between the connecting frame and the base to provide strength to the attachment.

9. [Previously presented] An attachment according to claim 8, wherein said support structure consists of three perpendicular supports.

10. [Currently amended] An attachment according to claim 8, wherein said front surface is shaped as a concave shape with radius ranges from 4 to 16 feet.

11. [Currently amended] An attachment according to claim 8, wherein said front surface is shaped as a convex shape with radius ranges from 4 to 16 feet.

12-13. [Canceled].

14. [Original] A method for smoothing the walls of a swimming pool during the construction of a swimming pool comprising the steps of:

- a. connecting a vehicle with an attachment having a connecting frame, a base and a curved front surface with an edge designed for cutting,

- b. transporting the attachment to the swimming pool wall,

- c. raising or lowering the attachment while contacting the wall surface with the curved front surface of the attachment to smooth the walls,

- d. collecting the dirt and other items at the bottom of the swimming pool or spreading the dirt and other items along the bottom of the pool by utilizing the attachment and

- e. repeating the steps above as necessary.

15. [Currently Amended] An attachment for securing to a backhoe having;

A connecting frame with two supporting cutouts towards the bottom for allowing the insertion of a backhoe's latches and a clamp mechanism attached toward the top for securing the attachment;

A base connected perpendicular to said connecting frame and near the bottom so that the base is directed just above the backhoe's connecting point providing support when the attachment is connected to the backhoe;

A front surface perpendicular to the ground;

Said supporting cutouts are oriented such that when the backhoe's latches are inserted the latches face the front surface;



Said front surface connected to the end of the base opposite the connecting frame and vertically such that the front surface extends above and below the base and said front surface includes a surface for cutting located at the top of the front surface at a distance furthest from the ground and ;

A support structure connected between said connecting frame and said base to provide strength to the attachment.

16. [Currently Amended] An attachment according to claim 15, wherein said front surface is shaped as a concave shape with radius ranges from 4 to 16 feet.

17. [Canceled].

18. [Canceled].

19. [Canceled].

20. [Currently Amended] An attachment for securing to a powered excavator having;

A connecting frame with two supporting cutouts towards the bottom for allowing the insertion of a powered excavator's latches and a clamp mechanism attached toward the top for securing the attachment;

A base connected perpendicular to said connecting frame and near the bottom so that the base is directed just above the powered excavator's connecting point providing support when the attachment is connected to the powered excavator;

A front surface perpendicular to the ground;

Said supporting cutouts are oriented such that when the backhoe's latches are inserted the latches face the front surface;

Said front surface connected to the end of the base opposite the connecting frame and vertically such that the front surface extends above and below the base and said front surface includes a beveled edge located at the top of the front surface;

A support structure connected between said connecting frame and said base to provide strength to the attachment.

21. [Currently Amended] An attachment according to claim 20, wherein said front surface is shaped as a concave shape with radius ranges from 4 to 16 feet.

22. [Canceled].

23. [Canceled].

24. [Canceled].

**"Revised"**  
**APPLICATION**  
**FOR**  
**U.S. PATENT**  
**"With Modifications"**

TITLE: Attachment for Forming Shapes Following Excavation

INVENTORS: William Orman Wollgast & James Oliver Ellinwood

**ATTACHMENT FOR FORMING SHAPES FOLLOWING EXCAVATION**

**CROSS-REFERENCE TO RELATED APPLICATIONS**

[1] Not Applicable

**STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR  
DEVELOPMENT**

[2] Not Applicable

**REFERENCE TO A "SEQUENCE LISTING" A TABLE, OR A COMPUTER  
PROGRAM LISTING APPENDIX SUBMITTED ON A COMPACT DISC**

[3] Not Applicable

**FIELD OF THE INVENTION**

[4] This invention pertains to an attachment for forming shapes following excavation. More particularly, this invention pertains to an attachment for vehicles such as skidsteer loaders, back hoes, etc. which can be used in the construction of swimming pool walls, ditches, sidewalks, etc. where curved shapes are required.

**DESCRIPTION OF RELATED ART**

[5] The use of attachments on skidsteer loaders, backhoes and powered excavating equipment to aid in performing various tasks is known. During the excavation of a swimming pool, it is common to use a skidsteer because of its smaller size and maneuverability. Many swimming pools are excavated using a skidsteer and a standard bucket attachment. Skidsteer loaders with a standard bucket attachment are used to remove dirt from a hole in constructing a swimming pool. However, the standard bucket used on skidsteer loaders or back-hoes leave the walls to a swimming pool requiring significant smoothing out or leveling. This smoothing out process is performed manually by workers using shovels. This manual process of smoothing out the walls is time consuming, requires much effort and is costly. In addition, some areas of the country are very rocky and this adds to the difficulty in manually smoothing out the walls.

## BRIEF SUMMARY OF THE INVENTION

[6] This present invention is an attachment for vehicles such as skidsteer loaders, back hoes and powered excavators that can be used to quickly smooth out the walls of a swimming pool following the excavation and prior to the steel reinforcement phase. The attachment is connected to the vehicle by using the cutouts and clamping mechanism and transported to the wall of the swimming pool. The attachment is then lifted and placed in contact with the top of the wall of the swimming pool. The attachment is then lowered to the bottom of the wall of the swimming pool making contact with the wall. The invention quickly smoothes the wall surface of the swimming pool by knocking the dirt and other items to the ground or by cutting any tree limb, rock, etc. that may be in contact with the invention by contacting a beveled edge. The process of raising and lowering the attachment while making contact may be repeated as necessary to flatten the surface.

[7] This invention significantly reduces and may even eliminate the need for workers to spend time and effort smoothing the walls. This invention significantly reduces the time required to prepare the walls of a swimming pool, ditch, sidewalk, etc. for the steel reinforcement stage. In addition, this invention improves the safety of swimming pool construction by eliminating the exposure of workers to an operating skidsteer loader in the limited swimming pool area.

[8] This invention reduces the costs of building a swimming pool by reducing the number of workers required in the construction process. In addition, the use of the invention will reduce the amount of gunite required in the swimming pool construction process due to the smoothness of the resulting walls.

### **BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S)**

[9] FIG.1 is a front perspective view from a slightly elevated view according to one embodiment of the instant invention;

FIG.2 is a rear perspective view of the attachment shown in FIG.1;

FIG.3 is an overhead plan view of the attachment shown in FIG.1;

FIG.4 is a front perspective view of the attachment shown in FIG.1 from the same elevation;

FIG.5 is a bottom perspective view of the attachment shown in FIG.1;

FIG.6 is a rear perspective view of the attachment shown in FIG.1 from the same elevation;

FIG.7 is a side plane view of the attachment shown in FIG.1;

FIG.8 is an environmental view illustrating a conventional skidsteer loader with the present invention attached.

### **DETAILED DESCRIPTION OF THE INVENTION**

[10] The present invention now will be described more fully hereinafter with reference to the accompanying drawings, in which preferred embodiments of the invention are shown. This invention may, however, be embodied in many different forms and should not be construed as limited to the embodiment set forth herein; rather, these embodiments are provided so that this disclosure will be thorough and complete, and will fully convey the scope of the invention to those skilled in the art. Like numbers refer to like elements throughout.

[11] With reference to the drawings, FIG.1 illustrates an attachment according to the instant invention. As illustrated, the attachment includes a curved front surface 11 with beveled edges attached to a base 12. In addition, three support structures 13, 14, and 15 are attached on top of the base 12 and in contact with the curved front surface 11 and the connecting frame 18. A flat surface 19 is connected directly on top of the support structures 13, 14 and 15. The sides 16 and 17 are connected to the base 12, curved front

surface 11, the walls 22 and 23 and the covers 20 and 21. The drawing illustrates an attachment with both a top beveled edge (26) and bottom beveled edge (27). The invention can have either edge.

[12] FIG. 2 shows the connecting frame 18 with 2 large cutouts as well as 2 extensions 24 and 25 with rectangular cutouts for the insertion of the arms of a vehicle, for example a skid steer loader. The extensions 24 and 25 are angled to assist the connection with a vehicle. The clamping mechanism 28 is shown. Also, the cutouts 29 and 30 are shown.

[13] FIG. 3 shows the curved front surface 11 that makes contact with the wall of the swimming pool, ditch, etc. and forms the smoothed out walls. The base 12 is where dirt may accumulate as the invention is lowered to the bottom surface of the swimming pool wall. Support structures 13, 14 and 15 are shown from an overhead view.

[14] FIG.4 is a front perspective view of the attachment. The curved front surface 11 makes direct contact with the swimming pool walls.

[15] FIG. 5 is a bottom perspective. The curved front surface 11 as well as the base 12 are shown.

[16] FIG.6 is a rear perspective view that shows the vertical location of the base 12 relative to the curved front surface 11 and the sides 16 and 17. This vertical distance allows the invention to collect dirt at the bottom of the swimming pool after being lowered and to drag the dirt for collection or to be spread along the swimming pool bottom.

[17] FIG. 7 shows a side plane view of the attachment and shows how the extension 24 is angled toward where the skidsteer loader is inserted. Also, the curved front surface 11 is shown.

[18] FIG.8 illustrates a conventional skidsteer loader attached to the invention. The connecting frame 18 is against the skidsteer loader and curved front surface 11 is directed toward the swimming pool wall or ditch wall. The base 12 is parallel to the ground. The drawing shows a top beveled edge (26) and bottom beveled edge (27). The invention can be with either edge.

### **ABSTRACT OF THE DISCLOSURE**

**[19]** An attachment for a skid steer loader, back hoe or powered excavator that can be used to quickly smooth out the walls of a swimming pool, ditch, etc. following the excavation and the process of using the attachment. The attachment includes a vertical flat surface perpendicular to the ground for smoothing the walls of a swimming pool. The process will reduce the need for workers to spend time and effort smoothing the walls manually and improving the safety of swimming pool construction. The cost of building a swimming pool will be reduced significantly by decreasing the number of workers required in the construction process. The process of smoothing walls reduces the amount of gunite required in the swimming pool construction process and thus improving the economics for the pool builder.



**SEQUENCE LISTING**

**[20]** Not Applicable

**"Clean Version"**  
**APPLICATION**  
**FOR**  
**U.S. PATENT**

TITLE: Attachment for Forming Shapes Following Excavation

INVENTORS: William Orman Wollgast & James Oliver Ellinwood

**ATTACHMENT FOR FORMING SHAPES FOLLOWING EXCAVATION**

**CROSS-REFERENCE TO RELATED APPLICATIONS**

[1] Not Applicable

**STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR  
DEVELOPMENT**

[2] Not Applicable

**REFERENCE TO A "SEQUENCE LISTING" A TABLE, OR A COMPUTER  
PROGRAM LISTING APPENDIX SUBMITTED ON A COMPACT DISC**

[3] Not Applicable

**FIELD OF THE INVENTION**

[4] This invention pertains to an attachment for forming shapes following excavation. More particularly, this invention pertains to an attachment for vehicles such as skidsteer loaders, back hoes, etc. which can be used in the construction of swimming pool walls, ditches, sidewalks, etc. where curved shapes are required.

**DESCRIPTION OF RELATED ART**

[5] The use of attachments on skidsteer loaders, backhoes and powered excavating equipment to aid in performing various tasks is known. During the excavation of a swimming pool, it is common to use a skidsteer because of its smaller size and maneuverability. Many swimming pools are excavated using a skidsteer and a standard bucket attachment. Skidsteer loaders with a standard bucket attachment are used to remove dirt from a hole in constructing a swimming pool. However, the standard bucket used on skidsteer loaders or back-hoes leave the walls to a swimming pool requiring significant smoothing out or leveling. This smoothing out process is performed manually by workers using shovels. This manual process of smoothing out the walls is time consuming, requires much effort and is costly. In addition, some areas of the country are very rocky and this adds to the difficulty in manually smoothing out the walls.

## **BRIEF SUMMARY OF THE INVENTION**

[6] This present invention is an attachment for vehicles such as skidsteer loaders, back hoes and powered excavators that can be used to quickly smooth out the walls of a swimming pool following the excavation and prior to the steel reinforcement phase. The attachment is connected to the vehicle by using the cutouts and clamping mechanism and transported to the wall of the swimming pool. The attachment is then lifted and placed in contact with the top of the wall of the swimming pool. The attachment is then lowered to the bottom of the wall of the swimming pool making contact with the wall. The invention quickly smoothes the wall surface of the swimming pool by knocking the dirt and other items to the ground or by cutting any tree limb, rock, etc. that may be in contact with the invention by contacting a beveled edge. The process of raising and lowering the attachment while making contact may be repeated as necessary to flatten the surface.

[7] This invention significantly reduces and may even eliminate the need for workers to spend time and effort smoothing the walls. This invention significantly reduces the time required to prepare the walls of a swimming pool, ditch, sidewalk, etc. for the steel reinforcement stage. In addition, this invention improves the safety of swimming pool construction by eliminating the exposure of workers to an operating skidsteer loader in the limited swimming pool area.

[8] This invention reduces the costs of building a swimming pool by reducing the number of workers required in the construction process. In addition, the use of the invention will reduce the amount of gunite required in the swimming pool construction process due to the smoothness of the resulting walls.

### **BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S)**

[9] FIG.1 is a front perspective view from a slightly elevated view according to one embodiment of the instant invention;

FIG.2 is a rear perspective view of the attachment shown in FIG.1;

FIG.3 is an overhead plan view of the attachment shown in FIG.1;

FIG.4 is a front perspective view of the attachment shown in FIG.1 from the same elevation;

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FIG.8 is an environmental view illustrating a conventional skidsteer loader with the present invention attached.

### **DETAILED DESCRIPTION OF THE INVENTION**

[10] The present invention now will be described more fully hereinafter with reference to the accompanying drawings, in which preferred embodiments of the invention are shown. This invention may, however, be embodied in many different forms and should not be construed as limited to the embodiment set forth herein; rather, these embodiments are provided so that this disclosure will be thorough and complete, and will fully convey the scope of the invention to those skilled in the art. Like numbers refer to like elements throughout.

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[17] FIG. 7 shows a side plane view of the attachment and shows how the extension 24 is angled toward where the skidsteer loader is inserted. Also, the curved front surface 11 is shown.

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**SEQUENCE LISTING**

**[20]** Not Applicable

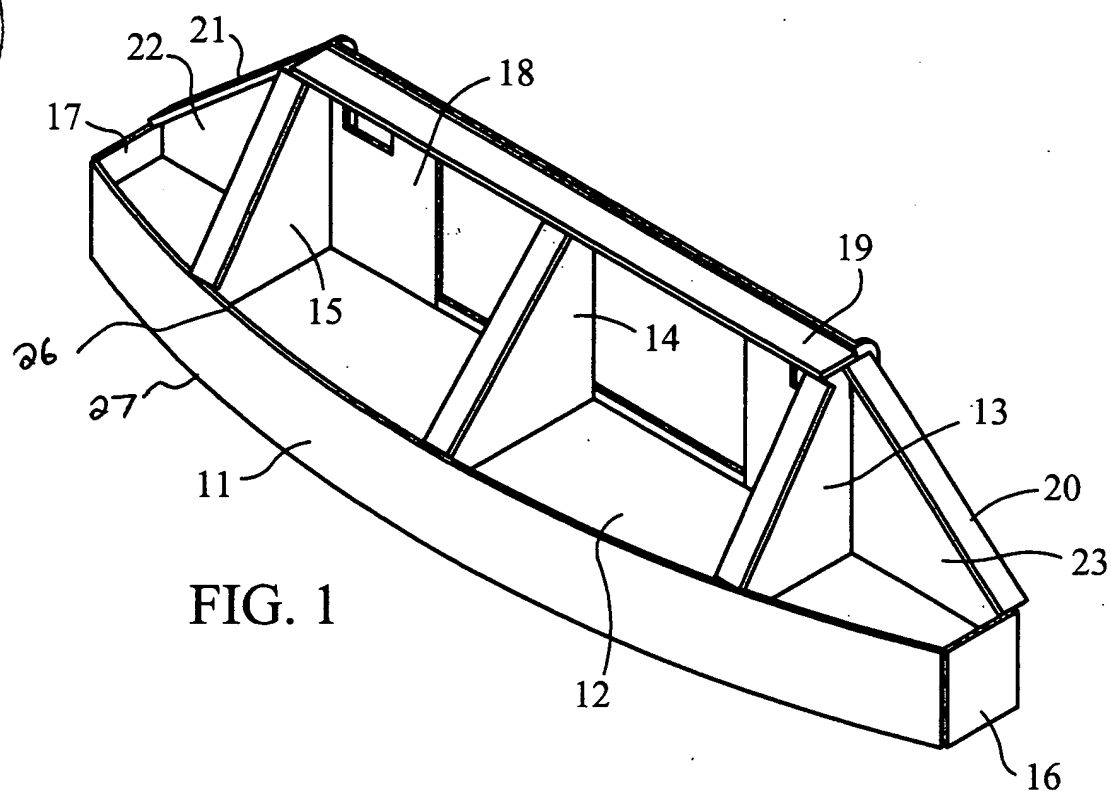


FIG. 1

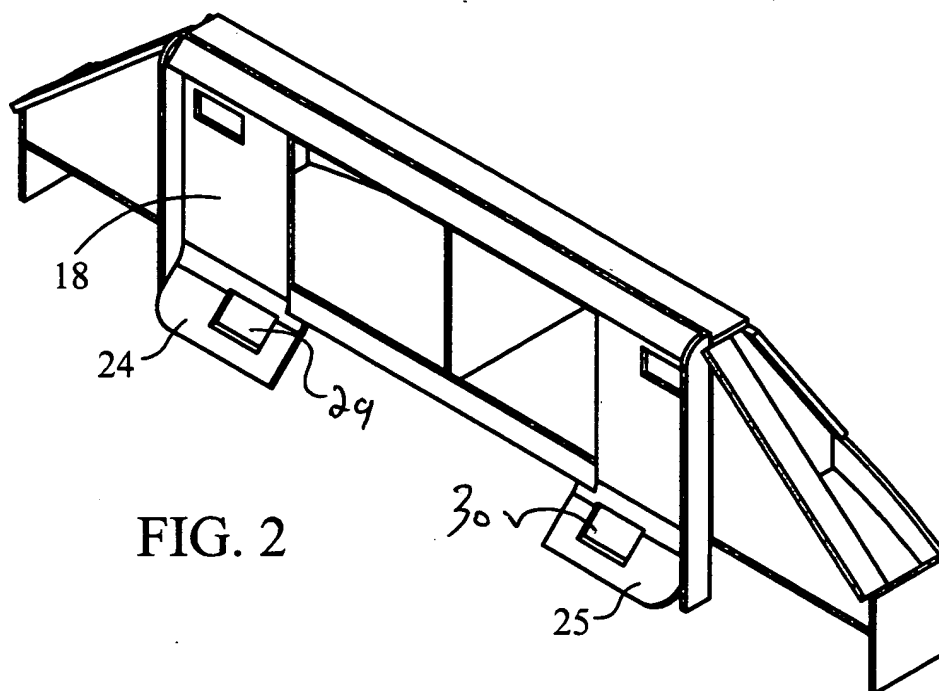


FIG. 2

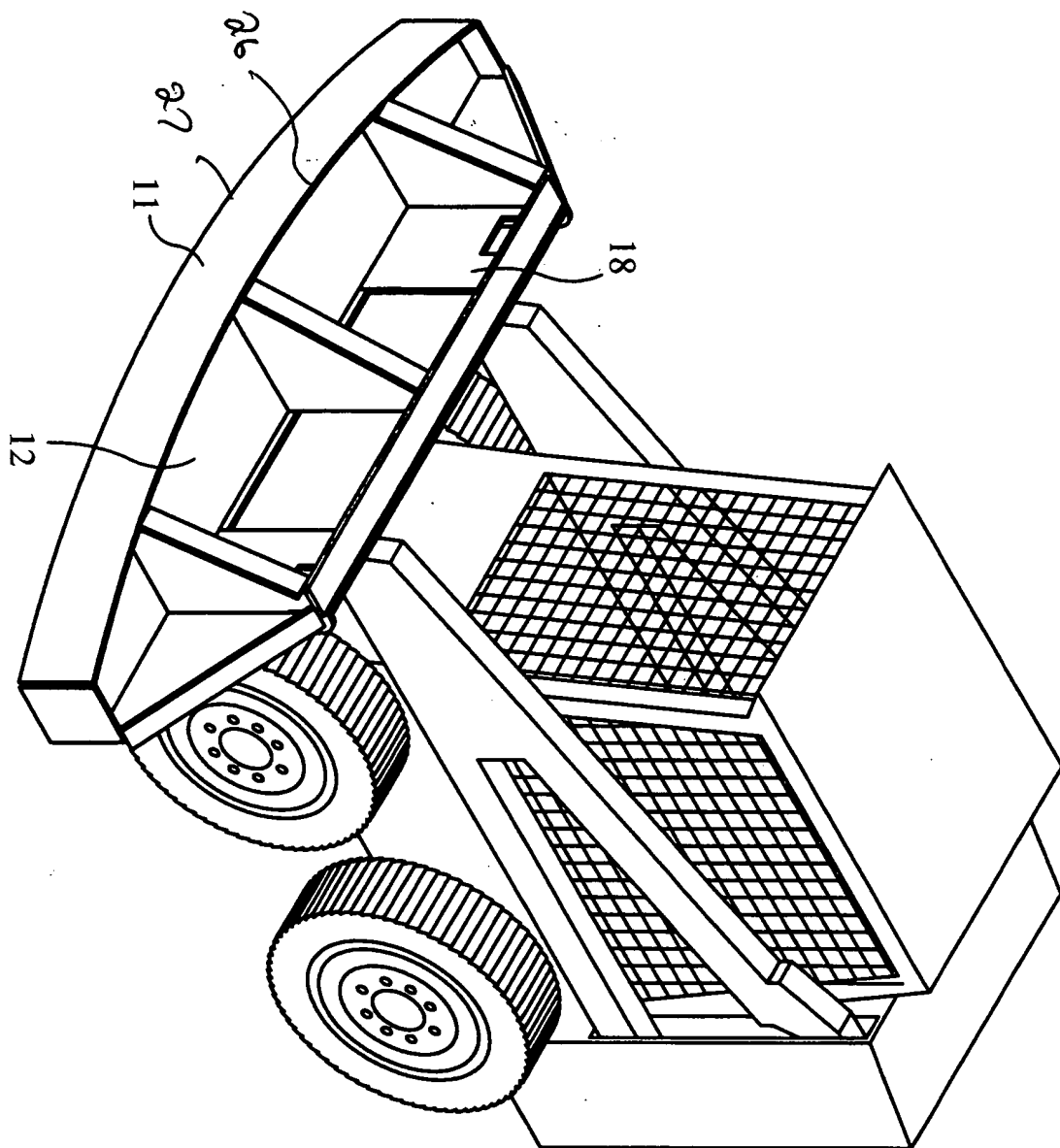


FIG. 8